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# United States Patent [19]

**Volkonsky**

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[54] **APPARATUS FOR DIRECTING A PARALLEL PROCESSING COMPUTING DEVICE TO FORM AN ABSOLUTE VALUE OF A SIGNED VALUE**

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[\*] **Notice:** This patent is subject to a terminal disclaimer.

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[58] **Field of Search** ..... 364/715.012, 715.011, 364/715.08, 768, 748.11

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## [57] **ABSTRACT**

In the present invention, a method for directing parallel processing computing device to perform the operation of setting a signed value of N bits to an absolute value comprises the steps of: performing an arithmetic shift right of N-1 bit to form a bit mask; performing an exclusive-OR logical operation with the signed value of N bits and the bit mask to form a result; and subtracting the bit mask from the result of the exclusive-OR logical operation to form the absolute value of the signed value of N bits. Further, an apparatus for parallel processing a signed value to form an absolute value comprises: means for performing an arithmetic shift right of N-1 bit to form a bit mask; means for performing an exclusive-OR logical operation with the signed value of N bits and the bit mask to form a result; and means for subtracting the bit mask from the result of the exclusive-OR logical operation to form the absolute value of the signed value of N bits.

**3 Claims, 3 Drawing Sheets**

